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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,094	07/18/2001	Roberto Ponticelli	38146	7390

29569 7590 05/19/2004

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253 N. MAIN STREET
JOHNSTOWN, OH 43031

EXAMINER

LEFKOWITZ, SUMATI

ART UNIT	PAPER NUMBER
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2112

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/682,094

Applicant(s)

PONTICELLI ET AL.

Examiner

Sumati Lefkowitz

Art Unit

2112

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-22 are pending.

Drawings

2. The drawings are objected to because
- in Figure 1, bus 8 is not labeled as an I2C bus

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. The abstract of the disclosure is objected to because
- it fails to mention that an extender is used to allow devices to be connected over the I2C bus over longer distances than would normally be permitted using the I2C bus
Correction is required. See MPEP § 608.01(b).

Claim Objections

4. Claims 3, 5-8, 10, 14, 16-19 and 21 are objected to because of the following informalities:
 - a. As to claims 3 and 14, "protocal" should read —protocol—

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b. As to claims 5-8 and 16-19, "said remote device" is inconsistent with "a plurality of remote devices" recited in the independent claims

c. As to claims 10 and 21, "remoted" should read "remote", but "said remote device" would still be inconsistent with "a plurality of remote devices" recited in the independent claims

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-9, 11-20 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Sheikh et al., 6,266,721.

As to claims 1-9, 11-20 and 22 → [1, 12]: Sheikh discloses a device (note Figure 2, server 100) comprising a plurality of processing means (note Figure 2, CPU 164, controllers 166, 168, 170, 172, 174, 176, 178) connected to a buffer means (note Figure 3, switch 228 and microcontroller bus extender 230) which is connected to communication bus (note I2C bus of column 8, line 15 – column 11, line 6) which is connected to a plurality of remote devices (note Figure 3, microcontroller 200 and element 122), [2, 13]: wherein the buffer means is an IIC buffer (note I2C bus of column 8, line 15 – column 11, line 6) with a high impedance

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disconnection circuit (note Figure 3, switch 228), [3, 14]: wherein a IIC protocol is used (note column 8, line 15 – column 11, line 6), [4, 15]: wherein the buffer means is an IIC buffer (note column 8, line 15 – column 11, line 6) and the buffer is connected by a high impedance disconnection circuit (note Figure 3, switch 228) to the processing means, and which said disconnection circuit will disconnect said IIC buffer based on a BUS_En signal (note column 10, line 57 – column 11, line 6, wherein whatever signal is used to control the state of the switch reads on the claimed BUS_En signal), [5, 16]: wherein said remote device is connected to a peripheral device (note Figure 1, element 124), [6, 17]: wherein said remote device is a microcontroller (note Figure 3, microcontroller 200), [7, 18]: wherein said remote device (i.e., PIC16C65) is comprised of a microcontroller, RAM memory, ROM memory, a non-volatile memory, an IIC communication port with SCL and SDA lines, an I/O port for interconnection with a peripheral device, a relay port with COM, NC and NO contacts, an ADC converter for analogical voltage readings, a timer WDT, a POWER conditioning system, and an information processing means (note PIC16C65 data sheets, which are being provided as evidence that PIC16C65 comprises the limitations claimed), [8, 19]: wherein the communication bus is connected to the remote device through a high impedance disconnection means (note Figure 3, switch 228), [9, 20]: wherein the buffer is a bi-directional IIC buffer which amplifies the signal on the communication bus (note column 10, line 67 – column 11, line 6 and evidence provided by Applicant's specification [0074], which recites the use of the same bus extender and describes it as being a bi-directional buffer which amplifies signals on the bus), [11, 22]: wherein said the high impedance switch makes it possible to use two networks of different speeds connected to the same master (i.e., inherent in the fact that a high impedance switch is used – the presence/use

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of the high impedance switch results in the ability to use two networks of different speeds connected to the same master).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 10 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sheikh et al., 6,266,721 (hereinafter Sheikh) in view of Ku et al., 6,438,624 (hereinafter Ku).

Sheikh fails to disclose that the remote device will have a default address when added to the communication bus, and said processing means issues a general config address command to a plurality of remote devices through the communication bus, which will put the remote devices into a wait status, and when the processing means issues a general command address to all the

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remote devices on the communication bus the remote devices will act as being addressed with their address.

Ku discloses that a newly added device will have a default address when added to the communication bus, processing means issues a general config address command to a plurality of newly added devices through the communication bus, which will put the devices into a wait status, and when the processing means issues a general command address to all the devices on the communication bus the devices will act as being addressed with their address (note column 2, lines 44-61 and column 5, lines 17-39).

It would have been obvious to one of ordinary skill in the art at the time of the invention employ the use of an automatic address assignment of the I2C devices so as to eliminate the need for additional hardware or manual intervention, as Ku teaches at column 5, lines 37-39.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure, as the prior art teaches or suggests communicating over longer distances with the I2C bus.

US PG-PUBS: 2002/0108076 A1 Barenys et al.

US Patents: 6,664,815 Andrews et al. 6,597,197 Mosley et al.

6,378,024 Huang 6,362,654 Anderson et al.

6,233,635 Son 6,189,109 Sheikh et al.

5,995,512 Pogue, Jr.

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sumati Lefkowitz whose telephone number is 703-308-7790.

The examiner can normally be reached on Monday-Friday from 6:00-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached at 703-305-4815.

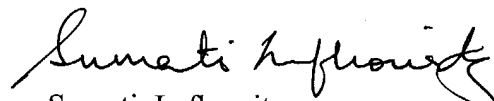
The fax phone numbers for the organization where this application or proceeding is assigned are:

703-746-7238 for After-Final communications

703-872-9306 for Official communications

703-746-5661 for Non-Official/Draft communications

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



Sumati Lefkowitz
Primary Examiner
Art Unit 2112

sl
May 13, 2004